

1. The table below gives the ages of some math teachers at NPENN HS. Find the minimum and maximum values, quartiles, range, and interquartile range. ~~Then make a box-and-whisker plot.~~

Teacher	Age	Teacher	Age
Curley	36	Woodbury	63
McGinley	30	Gourley	31
Leibowitz	46	Crain	27
Budweg	26	Christiansen	29
Machado	36	Hynes	62

$(36+31) = 33.5$

Min: 26 Max: 63  
 Q: 29 Q: 33.5 Q: 46  
 Range: 37 IQR: 17

Algebra II  
Notes 12.3

Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Pd: \_\_\_\_\_

### 12.3 Box-and-Whisker Plots

In order to draw a box-and-whisker plot, you need to first find the following:

Range: \_\_\_\_\_  
 Quartiles: \_\_\_\_\_  
 Interquartile Range: \_\_\_\_\_

**Example 1:** Earthquake intensities are measured on the Richter scale. For the earthquake intensities listed below find the following:

7.2 6.8 8.2 6.8 6.8 7.0 6.5 7.2 7.0  
 7.3 6.9 7.1 6.4 7.0 6.6

a. range

b. quartiles

c. interquartile range

Algebra II  
Notes 12.3

Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Pd: \_\_\_\_\_

**You try:** Find the range, quartiles, and interquartile range for each set of data.

1.) 75, 90, 53, 85, 75, 83, 73, 80, 46, 89, 91, 93, 85, 95, 68, 88, 97, 70, 96

range: \_\_\_\_\_  
 Q: \_\_\_\_\_  
 Q: \_\_\_\_\_  
 Q: \_\_\_\_\_  
 interquartile range: \_\_\_\_\_

2.) 82, 65, 11, 31, 50, 95, 33, 88, 79, 10, 15, 45, 51, 66, 53, 68

range: 85  
 Q: 32  
 Q: 52  
 Q: 73.5  
 interquartile range: 41.5

Algebra II  
Notes 12.3

Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Pd: \_\_\_\_\_

**Example 2:** Use the data from Example 1 to create a box-and-whisker plot.

Minimum: 6.4  
 Maximum: 8.2  
 Q: 6.8  
 Q: 7.0  
 Q: 7.2

Create box-and-whisker plots for the problems under the "You try" of your notes:

1.) Minimum: 46  
 Maximum: 97  
 Q: 73  
 Q: 84  
 Q: 90

2.) Minimum: \_\_\_\_\_  
 Maximum: \_\_\_\_\_  
 Q: \_\_\_\_\_  
 Q: \_\_\_\_\_  
 Q: \_\_\_\_\_

HW

Box and Whisker Plot Worksheet